

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An insulated flexible electrical circuit suitable for implantation comprising:
 - a first structural self supporting polyparaxylylene layer deposited from a vapor phase;
 - an electrical conductor deposited on said first polyparaxylylene layer;
 - a second paraxylylene layer deposited from a vapor phase that defines at least one aperture exposing said electrical conductor;
wherein said electrical conductor is located between said first polyparaxylylene layer and said second paraxylylene layer.
2. Cancelled.
3. (Original) The electrical circuit of claim 1, further comprising at least one polymer layer between said first polyparaxylylene layer and second polyparaxylylene layer.
4. (Original) The electrical circuit of claim 3, wherein said polymer is comprised of polyimide.
5. (Original) The electrical circuit of claim 1, further comprising at least one polymer layer on said first polyparaxylylene layer or said second polyparaxylylene layer that is not located between said layers.
6. (Original) The electrical circuit of claim 5, wherein said polymer is comprised of polyimide.

7. (Original) The electrical circuit of claim 1, further comprising a layer of a polymer between said first polyparaxylylene layer and said electrical conductor.

8. (Original) The electrical circuit of claim 7, wherein said polymer is comprised of polyimide.

9. (Original) The electrical circuit of claim 1 wherein said electrical conductor is suitable for stimulating a nerve.

10. (Original) The electrical circuit of claim 1, wherein said electrical conductor is suitable for sensing a signal from a nerve.

11. (Original) The electrical circuit of claim 1 wherein said second polyparaxylylene that defines at least one aperture further defines an electrode site suitable for detecting or transmitting signals to living tissue.

12. (Original) The electrical circuit of claim 1, wherein said electrical conductor is comprised of a biocompatible material.

13. (Original) The electrical circuit of claim 12, wherein said biocompatible material is selected from at least one metal from the group of titanium, platinum, gold or iridium.

14. (Original) The electrical circuit of claim 1, wherein said electrical conductor is at least partially coated with a biocompatible material.

15. (Original) The electrical circuit of claim 14, wherein said biocompatible material is comprised of titanium nitride.

16.-25. Cancelled.